

$^{11}\text{B}(\text{e},\text{e}')$ 1962Ed02,1967Sp02,1975Ka02

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	J. H. Kelley, C. G. Sheu		NP A880, 88 (2012)	1-Jan-2011

1962Ed02: ^{11}B ; measured not abstracted; deduced nuclear properties.

1966Ko08: $^{11}\text{B}(\text{e},\text{e}')$ E=50, 60 MeV, measured $\sigma(E_{\text{e}'})$. ^{11}B deduced levels, $B(\lambda)$.

1966St12: $^{11}\text{B}(\text{e},\text{e}')$, E=198.5, 333, 400 MeV; measured $\sigma(\theta)$.

1967Sp02: ^{11}B ; measured not abstracted; deduced nuclear properties.

1971Vi01: $^{11}\text{B}(\text{e},\text{e}')$ E=600-1150 MeV, measured $\sigma(E, E_{\text{e}'})$. Deduced form factors. ^{11}B deduced rms radii.

1975Ka02: $^{11}\text{B}(\text{e},\text{e}')$ E=52.3-90 MeV, measured $\sigma(E, E_{\text{e}'}, \theta)$. ^{11}B giant resonances, levels deduced $B(E2)$, $B(M1)$, form factors.

1979Po06: $^{11}\text{B}(\text{e},\text{e}')$ E=121, 186, 120 MeV, measured Coulomb form factors.

J^π from (1966Ko08).

 ^{11}B Levels

E(level)	J^π	Comments
0	$3/2^-$	$Q=3.72 \text{ fm}^2$, $\langle r^2 \rangle^{1/2}=2.42 \text{ fm}$ (1966St12). Magnetic elastic scattering at $\theta = 180^\circ$ shows strong M3 effects: the derived ratio of static M3/M1, 2.9 fm^2 0.2, suggests a j-j coupling scheme for $^{11}\text{B}_{\text{g.s.}}$.
2.13×10^3 20	$1/2^-$	$\Gamma_{\gamma 0}=0.159 \text{ eV}$ 15 $\Gamma_{\gamma 0}$: from $\Gamma_{\gamma 0}=0.16 \text{ eV}$ 2 (1966Ko08), $\Gamma_{\gamma 0}=0.170 \text{ eV}$ 34 (1962Ed02), 0.14 eV 4 (1975Ka02).
4.46×10^3 20	$5/2^-$	$\Gamma_{\gamma 0}=0.69 \text{ eV}$ 5 $\Gamma_{\gamma 0}$: from $\Gamma_{\gamma 0}=0.60 \text{ eV}$ 20 (1966Ko08), $\Gamma_{\gamma 0}=1.1 \text{ eV}$ 4 (1962Ed02), $\Gamma_{\gamma 0}=0.616 \text{ eV}$ 90 [M1:0.60 eV 9 /E2:0.016 eV 2] (1967Sp02), 0.73 eV 7 (1975Ka02).
5.03×10^3 20	$3/2^-$	$\Gamma_{\gamma 0}=1.87 \text{ eV}$ 12 $\Gamma_{\gamma 0}$: from $\Gamma_{\gamma 0}=2.4 \text{ eV}$ 8 (1966Ko08), $\Gamma_{\gamma 0}=3.7 \text{ eV}$ 2.5 (1962Ed02), $\Gamma_{\gamma 0}=1.73 \text{ eV}$ 14 (1967Sp02), $\Gamma_{\gamma 0}=2.12 \text{ eV}$ 21 (1975Ka02).
6.8×10^3 2	$3/2^-$	
7.3×10^3	$(5/2^-)$	$\Gamma_{\gamma 0}=1.0 \text{ eV}$ 5 $\Gamma_{\gamma 0}$: from 1.0 eV 5 (1962Ed02).
7.9×10^3 2	$3/2^+$	
8.6×10^3 2	$(3/2)^-$	$\Gamma_{\gamma 0}=0.97 \text{ eV}$ 8 $\Gamma_{\gamma 0}$: from 1.12 eV 32 [M1:0.72 eV 30/E2:0.40 eV 10 (1966Sp02), $\Gamma_{\gamma 0}=0.96 \text{ eV}$ 8 [M1:0.73 eV 7/E2: 0.23 eV 3] (1975Ka02)].
8.92×10^3 20	$5/2^-$	$\Gamma_{\gamma 0}$: from $\Gamma_{\gamma 0}=5.1 \text{ eV}$ 12 (1966Ko08), $\Gamma_{\gamma 0}=4.0 \text{ eV}$ 6 (1966Sp02), $\Gamma_{\gamma 0}=4.93 \text{ eV}$ 50 (1975Ka02). E(level): see (1975Aj02).
9.3×10^3		
10.6×10^3 2		
11.3×10^3 2		
12.2×10^3 2		
12.65×10^3 20		
13.0×10^3 1		E(level): from (1975Ka02), also see $E_x=13.00 \text{ MeV}$ 15 (1985Aj01). Γ : broad.
14.55×10^3 20		E(level): see (1985Aj01).
15.5×10^3		E(level): from (1975Ka02): Γ : broad.
16.7×10^3 2		E(level): see (1985Aj01).